FY 2009 Capital Budget TPS Report 50823

Agency: Department of Transportation/Public Facilities

Project Title:

Mitkof Highway - Scow Bay to Crystal Lake Hatchery Road: Pavement Rehabilitation and Drainage Improvements

State Funding Requested: \$ 7,000,000 House District: 2 - A

One-Time Need

Brief Project Description:

Resurface, shoulder and drainage improvements needed on Mitkof Highway between Scow Bay and Crystal Lake Hatchery Road.

Funding Plan:

Total Cost of Project: \$7,000,000

<u>Funding Secured</u> <u>Other Pending Requests</u> <u>Anticipated Future Need</u>

Amount FY Amount FY Amount FY

There is no other funding needed

Detailed Project Description and Justification:

Reclaim the pavement, strengthen the base and apply new asphalt-treated based and paved surface on Mitkof Highway between Scow Bay and Crystal Lake Hatchery Road. Improve ditch condition and roadside drainage. Extends from the end of recently-constructed pavement (Scow Bay) to the intersection with Crystal Lake Hatchery Road. Paved width will be 32 feet as far as the intersection with Papke's Landing Road, and 24 feet to the hatchery intersection. Length of 13 miles.

Funding is needed to replace failing sections of pavement and provide ancillary shoulder and drainage improvements. Pavement age and failure rates are exceeding the ability of maintenance and deferred maintenance programs to keep pace. Without this funding, these pavement surfaces will not be maintainable.

DOT&PF is committed to designing and constructing pavements with a long life and has made significant changes in our procedures and design philosophy to achieve this goal. Designing and constructing paved roads in Southeast Alaska is an engineering challenge. This is due primarily to the cool, moist environment, the multiple freeze-thaw cycles that occur throughout the typical winter, and the high percentage of studded tire use. Water, freeze-thaw action and studded tire use are a pavement's worst enemies. In the past the department has experienced shortened pavement life due to the use of relatively thin (2") pavement sections. Thin pavements have a limited fatigue life and studded tires erode the pavement surface resulting in rutting. The rutting reduces pavement thickness which ultimately leads to potholes. Over the past 10 years, the department has instituted several actions to increase and improve pavement life. We are now designing thicker pavement sections to improve fatigue life and are now using constituents within the surface pavement mix to resist studded tire wear. These include the use of hard aggregates, or asphalt rubber as well as incorporating modified asphalt cements to improve pavement response to traffic loading and resist thermal cracking. We have also implemented a "stabilized base" policy where underlying crushed aggregate bases will be locked up and strengthened with either an asphalt emulsion or

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foamed asphalt. All new projects have this additional strength feature incorporated to over come thaw weakening and to supplement the pavement performance. We are employing geosynthetic fabrics in our design to give more strength and drainage to the structural section.

Project Timeline:	Pro	ect	Time	line:
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Design and engineering is in place. Project work could begin in FY09.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

DOT&PF

Grant Recipient Contact Information:

Contact Name: Andy Hughes, Planning Chief

Phone Number: (907) 465-1776

Address: 6860 Glacier Hwy, Juneau, AK 99811

Email: andy.hughes@alaska.gov

Funds for this project are located in the Governor's FY09 Budget:

Yes. Project was included in the Gov's FY09 Trans GO Bond legislation, SB 224/HB 314 under the \$15.0 mill SE Pavement Rehab allocation.

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Has this project been through a public review process at the local level and is it a community priority? X Yes No

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STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

SARAH PALIN, GOVERNOR

3132 CHANNEL DRIVE PO Box 112500 JUNEAU, ALASKA 99811-2500

FAX: PHONE: (907) 586-8365 (907) 465-3900

March 12, 2008

The Honorable Bert Stedman Chairman, Senate Finance Committee Alaska State Legislature State Capitol, Room 516 Juneau, Alaska 99801-1182

Dear Senator Stedman:

At the February 25, 2008 hearing on SB 224 "An Act relating to the issuance of general obligation bonds for state transportation projects," the Senate Finance Committee requested a list of the transportation projects initially proposed by the Department of Transportation and Public Facilities (DOT&PF) for inclusion in SB 224. The transportation projects initially proposed were:

- Seward Highway Windy Corner safety improvements
- Parks Highway weight restriction removal
- Galena Campion Road and dust control
- Nome Snake River Bridge replacement
- Steese Highway/Johansen Expressway intersections improvements
- S.E. Alaska pavement rehabilitation (various roads)
- Rural sanitation roads and boardwalks
- Alegknagik Wood River Bridge¹

The list represents DOT&PF's initial recommendations. The criteria the Department considered in developing this initial list included safety, preservation, traffic congestion relief, and potential facilitation of gas pipeline preparation. The initial list was also intended to be geographically diverse because the bond package has to go for a statewide vote.²

¹ This project is in the current State Transportation Improvements Program amendment #17 with funding for final design and right-of-way which should be complete in 2009.

² This letter and the discussion of the contents of the initial list are produced in a spirit of cooperation and without waiver of any privilege otherwise applicable to the matters discussed herein, to the drafting of SB 224, or to related information or communications.

The state's long range plan "2030 Let's Get Moving" identified \$5.5 billion in needed transportation projects. SB 224 represents the opportunity to fund some of the needed transportation projects using low interest rate notes. Current low interest rates are below the rate of investment return on general funds in the Constitutional Budget Reserve. This means the state actually gets a better return from using bond proceeds to pay for these projects than general funds. DOT&PF has a very successful history of timely completing projects funded with state bond proceeds, including the recent completion of Elmore Road in Anchorage.

DOT&PF fully understands the constitutional role and authority of the Legislature to review, amend, and pass legislation such as SB 224. DOT&PF stands ready to work with the committee on any amendments to the bill or to answer further questions. Thank you.

Sincerely,

Leo von Scheben, P.E., L.S., M.B.A. Commissioner

cc: Mary Siroky, Legislative Liaison, Office of the Commissioner, DOT&PF Nancy Slagle, Director, Administrative Services, DOT&PF Southeast Alaska: Pavement Rehabilitation FY2009 Request: \$15,000,000 Reference No: 45629

AP/AL: Appropriation Project Type: Construction

Category: Transportation

Location: Southeast Alaska Contact: Frank Richards

House District: Southeast Areawide (HD 1-5) **Contact Phone**: (907)465-3900

Estimated Project Dates: 07/01/2008 - 06/30/2013

Brief Summary and Statement of Need:

Resurface, shoulder, and drainage improvements as needed along segments of Mitkof Highway between Scow Bay and Hatchery Lake Road; Craig to Klawock Highway; and Glacier Highway between Brotherhood Bridge and Auke Bay Ferry Terminal. This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.

Funding:	people and good FY2009	s. FY2010	FY2011	FY2012	FY2013	FY2014	Total
G/O Bonds	\$15,000,000						\$15,000,000
Total:	\$15,000,000	\$0	\$0	\$0	\$0	\$0	\$15,000,000
State Matc	h Required 🔽 O	ne-Time Project	☐ Phased	new	Phased - underway	/ Г . Ог	n-Going
0% = Minimu	m State Match % R	equired	☐ Amendm	ent	Mental Health Bill		
Operating 8	& Maintenance	Costs:			Amount		Staff
		Pro	ject Develo	pment:	0		0
Ongoing Operating:			0		0		
One-Time Startup:			tartup:	0			
				Totals:	0		0

Additional Information / Prior Funding History:

Project Description/Justification:

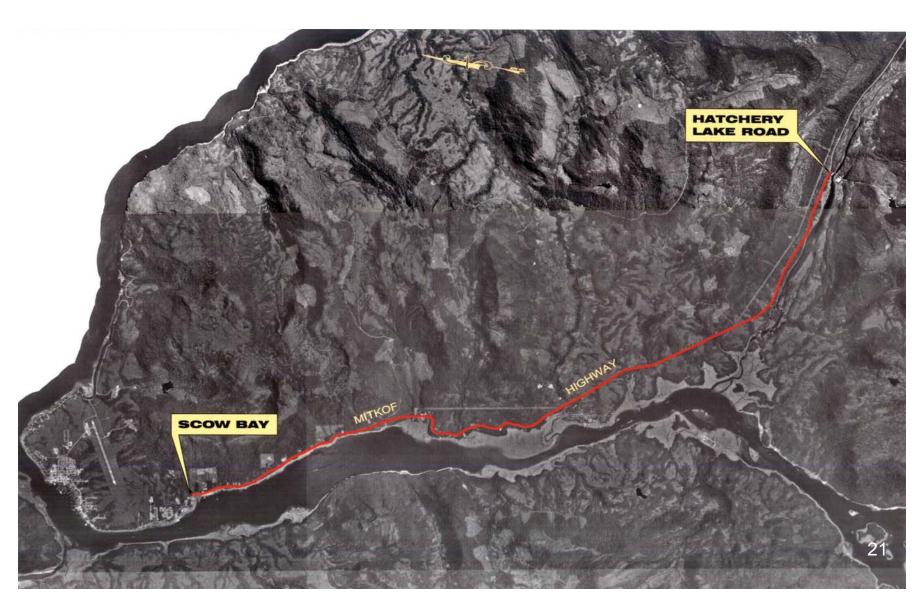
Funding is needed to replace failing sections of pavement and provide ancillary shoulder and drainage improvements. Pavement age and failure rates are exceeding the ability of maintenance and deferred maintenance programs to keep pace. Without additional funding these pavement surfaces will not be maintainable.

Southeast Region <u>Cost</u> Pavement Rehabilitation: \$15 million

Resurfaces failing sections of pavement, including associated shoulder and drainage improvements:

- ➤ Petersburg, Mitkof Highway Scow Bay to Hatchery Lake Rd. \$7 million
- ➤ Craig to Klawock Highway, \$4.8 million
- ➤ Juneau, Glacier Hwy worst sections between Brotherhood Bridge and Auke Bay Ferry Terminal, \$3.2 million

Mitkof Highway Section: Estimated cost \$7 million



Representative photos of Mitkof and Glacier Highways pavement conditions.



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FAX: (907) 586-8365 PHONE: (907) 465-3900

March 25, 2008

RECEIVED

The Honorable Bert Stedman Alaska State Legislature State Capitol, Room 516 Juneau, AK 99801-1182

Dear Senator Stedman:

This letter responds to your follow-up inquiries about SB 224, as outlined in your letter dated March 14, 2008.

The Department of Transportation and Public Facilities (DOT&PF) provided you with a list of proposed projects for inclusion in SB 224 (DOT&PF letter dated March 12, 2008.) These projects, and the projects ultimately included in the final version of the bill, are all projects that DOT&PF recommends.

Public process involved with the projects is of at least two types: (1) the transportation planning process; (2) the legislative public process.

Transportation planning has various levels of public process depending on the type of project. State owned transportation facilities (highways, ferries, airports), for example, may have different types and levels of public process than asset management projects (bridge evaluations, asphalt evaluation), or project planning undertaken by metropolitan planning organizations. For your convenience, enclosure #1 explains the three types of planning processes and identifies which was used to identify each of the projects listed in SB 224

A second level of public process is inherent in the legislative process associated with SB 224. This public process is recognized and protected by the Alaska Constitution: "Article II, section 14 requires three readings of a bill, on three separate days in order 'to ensure that the legislature knows what it is passing,' ... and to ensure an opportunity for the expression of public opinion and due deliberation." State v. A.L.I.V.E. Voluntary 606 P.2d 769, 772 (Alaska 1980) (citation and footnote omitted) (emphasis added). The public participation envisioned by the Alaska Constitution occurs after introduction of the bill, not during the conceptual bill drafting phase, and we do not read your letter to suggest something different.

You requested a ranking of projects. A true "apples to apples" comparison is not possible because the projects vary vastly in terms of type, objective, and geographic location. The broad variety of projects makes a checklist of "specific criteria" impractical to implement. Nevertheless, in order to cooperate with the Senate Finance Committee's request, we have enclosed a ranking (enclosure #2). The ranking is for discussion purposes only, and reflects DOT&PF's judgment and use of safety, preservation, traffic congestion relief, and potential facilitation of gas pipeline project criteria. Additionally, the list was intended to be geographically diverse as the bond package has to go for a statewide vote. I welcome further discussion and refinement of the proposed ranking.

You are correct that the Alaska Marine Highway Systems (AMHS) is not a part of SB 224, but the AMHS is well represented in the current Statewide Transportation Improvement Program (STIP) and GF capital budget. The table below identifies both recent and planned AMHS federal and state capital programs, excluding GF for operating.

	(All figures in millions of dollars.)		
<u>Year</u>	GF Capital	Federal & GF Match ¹	
2006	\$5.8	\$19.8	
2007	\$9.4	\$30.7	
2008	\$20.4	\$54.2	
2009	\$12.5 ²	\$50.8	

The above amounts reflect historically high levels when analyzed relative to total state highway capital funding.

I responded to your requests for accident report information and life span of asphalt by letter dated March 13.

Sincerely,

Leo von Scheben, P.E., L.S., M.B.A. Commissioner

Enclosures

cc: Frank Richards, Deputy Commissioner for Highways & Pub. Facilities, DOT&PF
Mary Siroky, Legislative Liaison, DOT&PF
Nancy Slagle, Director, Division of Administrative Services, DOT&PF

^{1 2008} and 2009 from Draft STIP Amendment #17

² 2009 Capital Budget Request

ENCLOSURE ONE - TRANSPORTATION PLANNING

DOT&PF's planning for projects consists of three types of planning:

- In the case of state owned transportation elements (highways, ferries, airports) we perform long range plans of several types, ranging from the geographic area plans, to corridor plans and system plans. All such planning efforts result in a list of projects. The listing may be generally prioritized as in those which should be near-term, mid-term, or long-term, but seldom does the plan list them in priority order or set plans within anticipated funding constraints.
- A second type of planning is known as asset management systems. Asset
 management consists of periodic inspection and evaluation of various asset
 classes such as bridges and pavements relies on data to identify the most critical
 needs There are four major management systems in place for highway assets,
 addressing pavement, bridges, safety and maintenance, and two management
 systems in place for AMHS addressing ferries and terminals.
- The Local Planning Process is the third type of planning. Large urban areas
 known as MPOs (AMATS and FMATS) are required to establish their own plans,
 and the state is required to follow these., Plans are also done by local
 governments under their Title 29 powers, and we consider these as legitimate
 expression of publicly vetted transportation needs.

Each of the projects considered for the SB 224, including both those in the bill and those considered but not included fall into one of the above three classes of planning and public identification.

Project	Planning Process	Type of Planning
Seward Highway – Windy	This project has been	Safety Management System
Corner safety improvements	identified in the	
	department's Highway	
	Safety Improvement Plan as	
J	the most dangerous	
	highway segments in the	1
	state.	
Parks Highway – Weight	This has been identified in	Pavement Management
Restrictions Removal	the list of needed	System
	improvements for future	_
	gasline work, as well as a	
ļ	high priority for pavement	
	rehabilitation in the	
	department's pavement	
	management system.	
Galena- Campion Road and	Community plan.	Local Planning Process
dust control		
Nome Snake River Bridge	The department's Bridge	Bridge Management System

Replacement	Inspection Program has listed this bridge as being a high priority for replacement.	
Steese Highway/Johansen Expressway intersection improvements	FMATS Long Range Transportation Plan	Local (MPO) Planning Process
SE Alaska Pavement rehabilitation	Pavement management system	Pavement Management System
Rural sanitation roads and boardwalks	Needs list and cooperation with local government.	Local Planning Process
Aleknagik Wood River Bridge	SW Alaska Transportation Plan	State Planning Process
Connect Anchorage Dowling Road – Old Seward to Minnesota	AMATS Long Range Transportation Plan	Local (MPO) Planning Process
Connect Anchorage Northern Access Study	AMATS Long Range Transportation Plan	Local (MPO) Planning Process
Kenai Borough Roads Projects	Needs List and cooperation with local government.	Local Planning Process
Dalton Highway Improvements	Dalton Highway Corridor Plan	State Planning Process

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ENCLOSURE TWO -- PROPOSED PROJECT RANKING

- (1) Seward Highway Windy Corner safety improvements
- (2) Nome Snake River Bridge Replacement
- (3) Connect Anchorage Dowling Road Old Seward to Minnesota
- (4) Parks Highway Weight Restrictions Removal
- (5) Steese Highway/Johansen Expressway intersection improvements
- (6) Dalton Highway Improvements
- (7) SE Alaska Pavement rehabilitation
- (8) Kenai Borough Roads Projects
- (9) Connect Anchorage Northern Access Study
- (10) Aleknagik Wood River Bridge
- (11) Rural sanitation roads and boardwalks
- (12) Galena- Campion Road and dust control